Monitoring Cow Comfort on Individual Dairies

Throughout the spring, multiple dairy farmers reached out to the CCE NCRAT Dairy Specialist to monitor cow comfort on their farms. Optimizing cow comfort is important for all dairies across the North Country as improved cow comfort is associated with increased production, health, and overall farm profitability, and farms are required by the National FARM Animal Care Program to meet certain cow comfort guidelines. It is important for farmers to have farm-specific data paired with best management guidelines from previous research to identify and address potential areas of improvement on their farm.

One farm wanted to better understand how their bedding practices (how often and how much they add bedding to the stalls) affected lying behavior, so our NCRAT Dairy Specialist attached lying time monitors to the cows for a week to observe behavior before, during, and after bedding was added to a pen (see picture). A second farm participated in a recent lameness discussion group with CCE NCRAT and wanted a follow-up lameness assessment during the spring months, so the Dairy Specialist lameness scored all the lactating animals. On a third farm, the Dairy Specialist has been monitoring cow comfort about once a year, and the farm asked for another assessment of lameness and hock and knee injuries.

For the first farm, the data indicated that the cows’ lying time was not as affected as originally thought, and this helped the farm decide not to invest in new bedding equipment and instead focus on improving their current protocols and monitoring bedding levels. For the second farm, lameness improved from the last visit, and the Dairy Specialist will monitor it again this fall. The assessment on the third farm showed hock and knee injuries were an area for improvement, and this led to an additional assessment of the heifer pens. The farm wants to replace the stall mats and add bedding to improve comfort, and the Dairy Specialist will reassess after changes have been made. These three farms are examples of how CCE NCRAT works with farms one-on-one, over time, to address their needs such as monitoring and improving cow comfort. Providing valuable data from individualized cow comfort assessments helps North Country dairies when making decisions on farm that have an impact on cow comfort and overall farm profitability.
Monitoring First Cutting Forage Quality Leads to Increased Farm Profitability

Cornell Cooperative Extension staff, industry consultants, and other researchers have collaborated to provide a comprehensive tracking tool for optimizing forage quality of alfalfa-grass fields across the North Country region for the past 10 years. Each spring, the team of ag educators, specialists, consultants, and researchers monitors alfalfa height in 20-30 fields across the 6-county region from early May through mid-June. CCE NCRAT publishes these weekly alfalfa height measurements, within the context of a simple model developed by Dr. Jerry Cherney at Cornell University, to predict and depict development progress and forage nutritional quality relative to optimum values. The weekly report informs and alerts forage quality-driven dairy and livestock farmers and ag industry professionals to in-season crop progress and the ideal first cutting harvest time. This tool is important because typically, the optimal timing for taking first cutting overlaps with the corn planting window - and many growers are reluctant to leave the corn planters alone for a week to turn to harvesting alfalfa-grass. The report provides both information and motivation.

By harvesting 1st-cutting alfalfa-grass at appropriately high quality, farms can improve efficiency of meat and milk production, reduce their need for purchased feeds, and gain whole-farm profitability. When farms harvest first cutting at peak or otherwise appropriate nutritional content for any alfalfa-grass mix, they are capturing forage with high digestible energy content. When forage digestible nutrients are optimized, animals can consume more forage to meet their nutritional needs, which improves animal productivity and reduces the need for purchased supplemental feeds. Animals also waste less high quality forage than lower quality. By closely monitoring and managing the quality of first cutting alfalfa grass, CCE NCRAT helps farms provide their animals with a high-forage, lower grain diet that maximizes milk and meat yields, milk quality, growth rates, weight gains, reduced feed costs, and increased profitability for the farm operation.
Dairy Prospects Program Exposes North Country Youth to the Dairy Industry

Labor is one of the biggest challenges and costs on dairies in the North Country. Finding skilled and interested people is becoming harder regardless of farm size or type. CCE advisory committees and farmers continually indicate there is a need to focus on the next generation and ensure that students are considering careers in the dairy industry, both on farms and with agribusinesses.

The CCE NCRAT Dairy Specialist partnered with CCE Jefferson staff to once again offer the Dairy Prospects Program to high school students in Jefferson and Lewis Counties. This program has been running since the early 2000s, and seven high school students, grades 9 through 12, from the two counties participated in the 2022-2023 program. Over the course of 10 months, the students toured or visited with 12 farms, 8 agribusinesses or industry representatives, and 2 colleges. Some of the visits included a fully robotic organic dairy, a custom slaughter and butcher shop, a goat dairy with on-farm processing, and a large dairy with a rotary parlor.

Overall the program was very well received by the students, and also by the farms that hosted the tours. As indicated on the program feedback survey, students liked “going around and seeing other farms”, “learning about the industry from different places and people”, and “learning different aspects of the agriculture industry”. Students indicated they learned about different jobs in the dairy industry, and one student said, “thank you … for giving us the opportunity to learn about what we could do with our future”. This program continues to provide local youth with an important opportunity to be exposed to all that the dairy industry has to offer and helps ensure there’s another generation of workers passionate about dairy.
Corn and Soybean Weed Control Herbicide Trial Plot Tours Held Across NNY

Recently, the Environmental Protection Agency has proposed atrazine label changes that will impact the current usage of this widely used and effective corn herbicide. Historically, Northern NY corn growers have relied on atrazine use rates higher than those outlined in the EPA’s proposal. To prepare corn growers for the possible reduction of atrazine use rates, CCE NCRAT conducted two on-farm research trials to evaluate corn weed control programs with and without atrazine.

Also, there has been a rapid adoption of Enlist E3 soybean varieties in NNY. The development and evaluation of several POST herbicide programs helps NNY soybean growers make informed decisions about their weed control systems, while reducing the development of herbicide resistant weeds. The CCE NCRAT soybean trial compared various postemergence approaches for control of multiple resistant marestail and troublesome weeds. These corn and soybean weed control on-farm research trials were funded by the Northern New York Agricultural Development Program.

This spring, three field days were held across NNY to showcase these important on-farm research trials. Growers, agribusinesses, crop consultants, and chemical representatives were given the opportunity to tour the plots to compare the effectiveness of each treatment. Attendees learned about the proposed atrazine herbicide label changes, strategic weed control strategies, and proper identification of many weed species found in NNY field crops. It also provided an opportunity for participants to receive continuing education credits needed to maintain their pesticide applicator license.

Our Mission

“The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people, and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically, and environmentally sustainable management practices and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.”

The North Country Regional Ag Team is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex counties.

Contact us directly through our website: http://ncrat.cce.cornell.edu/